CONTENTS VOLUME 62 JULY 1983

page 1 SILLERS, P. J. and FORER, A. Action spectrum for changes in spindle fibre birefringence after ultraviolet microbeam irradiations of single chromosomal spindle fibres in crane-fly spermatocytes

27 SPIEGEL, E. and HOWARD, L. Development of cell junctions in sea-urchin embryos

49 WHITE, M. K., BRAMWELL, M. E. and HARRIS, H. Kinetic parameters of hexose transport in hybrids between malignant and non-malignant cells

81 CAVAZZA, B., TREFILETTI, V., PIOLI, F., RICCI, E. and PATRONE, E. Higher-order structure of chromatin from resting cells. I. Electron microscopy of chromatin from calf thymus

103 NICOLINI, C., CAVAZZA, B., TREFILETTI, V., PIOLI, F., BELTRAME, F., BRAMBILLA, G., MARALDI, N. and PATRONE, E. Higher-order structure of chromatin from resting cells. II. High-resolution computer analysis of native chromatin fibres and freeze-etching of nuclei from rat liver cells

117 DONALDSON, D. J. and MAHAN, J. T. Fibrinogen and fibronectin as substrates for epidermal cell migration during wound closure

129 TRAUB, U. E., NELSON, W. J. and TRAUB, P. Polyacrylamide gel electrophoretic screening of mammalian cells cultured *in vitro* for the presence of the intermediate filament protein vimentin

149 MARGEL, S., OFARIM, M. and ESHHAR, Z. Cell fractionation with affinity ligands conjugated to agarose–polyacrolein microsphere beads

161 FISHER, P. R., GRANT, W. N., DOHRMANN, U. and WILLIAMS, K. L. Spontaneous turning behaviour by *Dictyostelium discoideum* slugs

171 MARKS, G. E. Feulgen banding of heterochromatin in plant chromosomes

177 PORTER, E. K., PARRY, D. and DICKINSON, H. G. Changes in poly(A)$^+$ RNA during male meiosis in *Lilium*

187 FRASER, R. S. S. and BARNES, A. Theoretical analysis of a method for determining the pattern of macromolecular synthesis during the cell cycle

209 KITAMURA, A. and STEERS, E. JR. Attachment of *Paramecium* to polystyrene surfaces. II. Induction of the attachment by hydrophobic reagents or immune immunoglobulin G

223 SWALES, L. S. and LANE, N. J. Insect intercellular junctions: rapid freezing by jet propane

237 SAGA, Y. and YANAGISAWA, K. Macrocyst development in *Dictyostelium discoideum*. III. Cell-fusion inducing factor secreted by giant cells

249 ELLEM, K. A. O. and KAY, G. F. The nature of conditioning nutrients for human malignant melanoma cultures

267 SCHOR, A. M., SCHOR, S. L. and ALLEN, T. D. Effect of culture conditions on the proliferation, morphology and migration of bovine aortic endothelial cells

287 MEIRELLES, M. N. L., MARTINEZ-PALOMO, A., SOUTO-PADRON, T. and DE SOUZA, W. Participation of concanavalin A binding sites in the interaction between *Trypanosoma cruzi* and macrophages

301 KIMBLE, M. and CHURCH, K. Meiosis and early cleavage in *Drosophila melanogaster* eggs: The effects of the claret non-disjunctional mutation

319 KENDALL, M. D., WARLEY, A., NICHOLSON, J. K. and APPLETON, T. C. X-ray microanalysis of proximal and distal tubule cells in the mouse kidney, and the influence of cadmium on the concentration of natural intracellular elements

339 WARLEY, A., STEPHEN, J., HOCKADAY, A. and APPLETON, T. C. X-ray microanalysis of HeLa S3 cells. II. Analysis of elemental levels during the cell cycle

351 GREEN, C. R., NOIROT-TIMOTHÉE, C. and NOIROT, C. Isolation and characterization of invertebrate smooth septate junctions

371 BARD, J. B. L., MCBRIDE, W. H. and ROSS, A. R. Morphology of hyaluronidase-sensitive cell coats as seen in the SEM after freeze-drying

385 TAKAGI, S. and NAGAI, R. Regulation of cytoplasmic streaming in *Vallisneria* mesophyll cells

407 WILLIAMS, N. E. Surface membrane regeneration in deciliated *Tetrahymena*

419 CROSSLEY, R. and HOLBERTON, D. V. Selective extraction with Sarkosyl and repolymerization *in vitro* of cytoskeleton proteins from *Giardia*

439 TAMIR, H., KUPSKY, W. J., HUANG, Y. L. and GERSHON, M. D. Serotonin-binding glycoprotein of rat platelets

459 GOLINSKA, K. Regulation of ciliary pattern in *Dileptus* (Ciliata). II. Formation of a cortical domain of sensory cilia from a domain of locomotor cilia